

## EAST Search History

| Ref # | Hits | Search Query  | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|------|---|--|------------------|---------|------------------|
| S1    | 1263 | plasma with ( chamber or encloure or envelope or tube or volume) and magnets same (volume or chamber or encloure or envelope or tube or volume) and magnets same (rods or supports) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 20:19 |
| S2    | 656  | S1 and @pd<="20020328"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 20:19 |

## EAST Search History

| Ref # | Hits  | Search Query   | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|-------|--|--|------------------|---------|------------------|
| S1    | 79472 | ion near4 source   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 09:42 |
| S2    | 0     | (ionization near3 volume\$1)with<br>(gas or vapor) and ion with<br>aperture same ion near4 beam and<br>(source) same emitting near4<br>electrons and first near4 mode and<br>second near4 mode | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 09:45 |
| S3    | 18    | (ionization near3 volume\$1) with<br>(gas or vapor) and ion with<br>aperture same ion near4 beam and<br>(source) same emitting near4<br>electrons and mode\$1                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 10:13 |
| S4    | 15    | S3 and (first and second) with<br>source   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 11:17 |
| S5    | 0     | S3 and (first and second) with<br>electron near4 source  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 10:14 |
| S6    | 15    | S3 and (first and second) near4<br>source  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 10:14 |
| S7    | 15    | S3 and (first and second) near4<br>source  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 11:17 |
| S8    | 15    | S7 and mode  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 11:40 |

## EAST Search History

|     |     |   |  |    |    |                  |
|-----|-----|---|--|----|----|------------------|
| S9  | 359 | source with (gas or vapor) and ion near4 source same ((gas or vapor) and (atomic near4 ion\$1)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 11:41 |
| S10 | 25  | S9 and (first and second) with mode   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 11:50 |
| S11 | 2   | S10 and @pd<="19991213"   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 11:54 |
| S12 | 57  | atomic near4 ion\$1 and molecular near4 ion\$1 and ( first and second) with mode\$1             | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:00 |
| S13 | 10  | S12 and @pd<="19991213"   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:09 |
| S14 | 2   | (atomic near4 ion\$1 and molecular near4 ion\$1) same (( first and second) with mode\$1)        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:09 |
| S15 | 57  | (atomic near4 ion\$1 and molecular near4 ion\$1) and (( first and second) with mode\$1)         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:09 |
| S16 | 10  | S15 and @pd<="19991213"   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:16 |

## EAST Search History

|     |      |  |  |    |    |                  |
|-----|------|--|--|----|----|------------------|
| S17 | 1213 | atomic near4 ion\$1 and molecular near4 ion\$1   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:35 |
| S18 | 415  | (gas or vapor) and ion near source and S17   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:16 |
| S19 | 142  | S18 and @pd<="19991213"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:37 |
| S20 | 1    | S19 and (first and second) near mode   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:43 |
| S21 | 14   | S19 and hot and cold   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:27 |
| S22 | 0    | atomic near4 ion\$1 and molecular near4 ion\$1 and (control\$3 or switch\$3) and ion near source with (gas or vapor)         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:36 |
| S23 | 0    | atomic near4 ion\$1 and molecular near4 ion\$1 and (control\$3 or switch\$3 or mode) and ion near source same (gas or vapor) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:36 |
| S24 | 256  | atomic near4 ion\$1 and molecular near4 ion\$1 and (control\$3 or switch\$3 or mode) and ion near source same (gas or vapor) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:36 |

## EAST Search History

| Ref # | Hits | Search Query  | DBs      | Default Operator | Plurals | Time Stamp       |
|-------|------|---|----------|------------------|---------|------------------|
| L1    | 2    | (plasma and chamber and magnets and field and rod\$1 same magnets and wall\$1).clm. | US-PGPUB | OR               | ON      | 2007/07/16 18:31 |

## EAST Search History

|     |     |  |  |    |    |                  |
|-----|-----|--|--|----|----|------------------|
| S25 | 90  | S24 and @pd<="19991213"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:42 |
| S26 | 0   | ion near3 source same (atomic<br>near4 ion\$1 and molecular near4<br>ion\$1)                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:42 |
| S27 | 165 | ion near3 source same (atomic<br>near4 ion\$1 and molecular near4<br>ion\$1)                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:42 |
| S28 | 77  | S27 and @pd<="19991213"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:42 |
| S29 | 3   | S28 and ((first and second) near4<br>(mode or switch\$3 or volatge near4<br>source or control\$3)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:44 |
| S30 | 4   | S28 and ((first and second) near4<br>(mode or switch\$3 or voltage near4<br>source or control\$3)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:46 |
| S31 | 61  | S28 and (mode or switch\$3 or<br>voltage near4 source or control\$3)                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:46 |
| S32 | 11  | S31 and cold and hot   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR | ON | 2007/07/15 12:47 |

## EAST Search History

| Ref # | Hits | Search Query  | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|------|---|--|------------------|---------|------------------|
| S1    | 1263 | plasma with ( chamber or encloure or envelope or tube or volume) and magnets same (volume or chamber or encloure or envelope or tube or volume) and magnets same (rods or supports) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 20:19 |
| S2    | 656  | S1 and @pd<="20020328"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/15 20:19 |